I. Remarks

Status of Claims

Claims 11(c), 11(d), 25(c), and 25(d) have been canceled herein without prejudice or disclaimer. Applicants reserve the right to pursue subject matter encompassed by all canceled claims in one or more divisional or continuation applications. Claims 11 and 25 have been amended to correct a typographical error, add a trademark designation, and to more particularly describe the claimed invention. Amended claims 11 and 25 find support in the claims as originally filed and throughout the specification. Specifically, support for amended claims 11 and 25 can be found, for example, at page 121, Table 1A (Gene 614, HWHGU54/SEQ ID NO: 1562). Accordingly, no new matter has been added. In addition, as requested by the Patent Office, Applicants have changed the disposition of claims 20-21, 24, and 31-33 from "previously presented" to "withdrawn." Accordingly, no new matter has been added. Finally, the Patent Office has requested Applicants to amend the specification to identify trademarks. To this end, Applicants have also submitted a substitute specification. Accordingly, no new matter has been added by these amendments. Upon entry of the present amendment, claims 11-12, 16, 20-21, 24-29, and 31-33 will be pending.

Request for Rejoinder of Product and Process of use Claims

Applicants respectfully request rejoinder and examination of withdrawn claims 20-21, 24, and 31-33 once the pending polypeptide claims are found allowable.

Objections to the Specification

Trademarks

The Patent Office has renewed its objection to the specification because "trademarks are disclosed throughout the instant specification and not all of them are capitalized or accompanied by the generic terminology." Paper No. 20060913, pages 2-3, No. 3. Applicants would like to thank the Patent Office for bringing these observations to their attention. Applicants have amended the specification to capitalize and identify trademarks as requested by the Patent Office. *See*, substitute specification enclosed herein. Applicants have also amended the claims where appropriate. Accordingly, Applicants respectfully request that the Patent Office's objection of the specification on the grounds that it contains unidentified trademarks be reconsidered and withdrawn.

New-Claim Objection

The Patent Office has also objected to claims 11 and 25 because they recite "amino acids 1-419 and 20-419 of SEQ ID NO:1562" when SEQ ID NO:1562 only contains 414 residues. Paper No. 20060913, page 3, No. 4. Again, Applicants would like to thank the Patent Office for bringing these typographical errors to their attention. Applicants have amended claims 11 and 25 to recite 1-414 or 20-414. Accordingly, Applicants respectfully request that the Patent Office's objection of claims 11 and 25 be reconsidered and withdrawn.

Priority Issues

The Patent Office has requested that Applicants provide clarification as to the priority date of the instant claimed sequence. *See*, Paper No. 20060913, page 3, No. 5. Applicants respectfully submit that the priority date of SEQ ID NO:1562, encoding HWHGU54 (gene 614), is June 22, 1998.

II. Rejection of claims 11-12, 16, and 25-29 under 35 U.S.C. § 112

Rejection of claims 11-12, 16, and 25-29 as allegedly requiring undue experimentation

The Patent Office rejected claims 11-12, 16, and 25-29 under 35 U.S.C. § 112, first paragraph because the claimed invention "while being enabling for the protein contained in SEQ ID NO:1562" allegedly "does not reasonably provide enablement for any fragment thereof." Paper No. 20060913, page 5, No. 12. More specifically, the Patent Office alleges that the "specification does not provide any empirical evidence of any [fragments of] 30 [or 50] residues" having the function recited in the claims. Paper No. 20060913, page 6, No. 12, last sentence of first full paragraph. Applicants respectfully disagree and traverse.

As a preliminary matter, Applicants have canceled claims 11(c), 11(d), 25(c), and 25(d), thereby obviating the Patent Office's rejection. Accordingly, Applicants respectfully request the Patent Office's rejection of claims 11-12, 16, and 25-29 under 35 U.S.C. § 112, first paragraph be reconsidered and withdrawn.

Rejection of claims 11-12, 16, 25-25 as allegedly lacking written description

The Patent Office has rejected claims 11-12, 16, and 25-29 under 35 U.S.C. § 112, first paragraph, as allegedly "containing subject matter which was not adequately described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the

inventor(s), at the time the application was filed, had possession of the claimed invention." Paper No. 20060913, page 11, No. 13. Specifically, the Patent Office contends (1) the claims directed to fragments encompass a genus that are not adequately described, (2) no correlation is made between structure and function, and (3) no description is provided of the claimed polypeptide fragments in association with the activity recited in the claims. *See*, Paper No.

20060913, pages 11-14, No. 13. Applicants respectfully disagree and traverse the rejection.

As a preliminary matter, Applicants have canceled claims 11(c), 11(d), 25(c), and 25(d), thereby obviating the Patent Office's rejection. Accordingly, Applicants respectfully request the Patent Office's rejection of claims 11-12, 16, and 25-29 under 35 U.S.C. § 112, first paragraph

for alleged lack of written description be reconsidered and withdrawn.

III. Conclusion

Applicants respectfully request that the above-made remarks be entered and made of record in the file history of the instant application. In view of the foregoing amendments and remarks, Applicants believe that this application is now in condition for allowance. The Examiner is invited to call the undersigned at the phone number provided below if any further action by Applicant would expedite the examination of this application.

If there are any fees due in connection with the filing of this paper, please charge the fees to our Deposit Account No. 08-3425. If a fee is required for an extension of time under 37 C.F.R. § 1.136, such an extension is requested and the fee should also be charged to our Deposit Account.

Dated: November 17, 2006

Respectfully submitted,

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